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PATENT
Attorney Docket No.: 02307Z-090130US
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On 7/19/02

TOWNSEND and TOWNSEND and CREW LLP

By: IREVOR Kwan

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Donald A. PHILLIPS et al.

Application No.: 09/831,958

Filed: November 17, 1999 (International
Filing Date for PCT/US99/27318)

For: NOVEL ENHANCERS OF PLANT
GROWTH

Examiner: L. Blaine Lankford

Art Unit: 1651

INFORMATION DISCLOSURE
STATEMENT UNDER 37 CFR §1.97 and
§1.98

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Washington, D.C. 20231

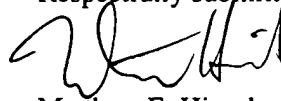
Sir:

The references cited on attached form PTO/SB/08A and PTO/SB/08B are being called to the attention of the Examiner. In accordance with 37 CFR §1.98(d), copies of references A-I, K-L, N-AF, AH, and AJ-BJ can be found in Application No. 09/369,955, filed August 6, 1999 (Attorney Docket No. 02307Z-0901010US). Copies of references J, M, AG, and AI are included. It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

As provided for by 37 CFR 1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

Applicant believes that no fee is required for submission of this statement, since it is being submitted prior to the first Office Action. However, if a fee is required, the Commissioner is authorized to deduct such fee from the undersigned's Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,



Matthew E. Hinsch
Reg. No. 47,651

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Sheet **1** of **5**

Complete if Known

Application Number	09/831,958
Filing Date	November 17, 1999
First Named Inventor	Phillips, Donald A.
Art Unit	1651
Examiner Name	L. Blaine Lankford
Attorney Docket Number	02307Z-090130US

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U.S. PATENT DOCUMENTS

Examiner	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Kind Code ² (if known)			
	A	4,436,547	03/13/1984	Sampson, et al.	
	B	4,704,161	11/03/1987	White, et al.	
	C	4,789,436	12/06/1988	Greenbaum E.	
	D	5,116,406	05/26/1992	Hyeon	
	E	5,298,483	03/29/1994	Yokoyama et al.	
	F	5,403,583	04/04/1995	Liu et al.	
	G	5,415,672	05/16/1995	Fahey et al.	
	H	5,597,400	01/28/1997	Nonomura, et al.	
	I	5,797,976	08/25/1998	Yamashita	
	J	5,919,448	07/06/1999	Maekawa et al.	
	K	5,925,538	07/20/1999	Perkins et al.	
	L	5,932,701	08/03/1999	Black et al.	
	M	5,935,571	08/10/1999	Aino et al.	
	N	5,958,104	09/28/1999	Nonomura et al.	

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FOREIGN PATENT DOCUMENTS

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	O	JP	01086822	03/31/89			
	P	JP	03109304	05/09/91			
	Q	JP	04166017	06/11/92			
	R	JP	08143406	11/16/94			
	S	JP	60115501	06/22/85			
	T	WO	96/21737 A1	07/18/96			
	U	WO	97/01572 A1	01/16/97			

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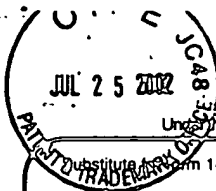
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	V	BAREA et al., "Impact on Arbuscular Mycorrhiza Formation of <i>Pseudomonas</i> Strains Used as Inoculants for Biocontrol of Soil-Borne Fungal Plant Pathogens"; <i>Applied and Environmental Microbiology</i> , 64(6):2304-2307 (1998)	

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<p>Substitute Form 1449B/PTO</p> <p>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</p> <p>(use as many sheets as necessary)</p> <p>Sheet <u>2</u> of <u>5</u></p>		Complete if Known	
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		Examiner Name	L. Blaine Lankford
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	W	BOADBENT et al., "C-Acetylphloroglucinols From <i>Pseudomonas Fluorescens</i> "; <i>Phytochemistry</i> , 15:1785 (1976)	
	X	BRIMECOMBE et al., "Effect of genetically modified <i>Pseudomonas fluorescens</i> strains on the uptake of nitrogen by pea from ¹⁵ N enriched organic residues"; <i>Letters in Applied Microbiology</i> , 26:155-160 (1998)	
	Y	BROWN, M.E., "Plant Growth Substances Produced by Micro-organisms of Soil and Rhizosphere"; <i>J. Appl. Bact.</i> , 35:443-451 (1972)	
	Z	COQUARD et al., "Molecular cloning and characterisation of the <i>ribC</i> gene from <i>Bacillus subtilis</i> : a point mutation in <i>ribC</i> results in riboflavin overproduction"; <i>Mol. Gen. Genet.</i> , 254:81-84 (1997)	
	AA	DECKERT, Gerard et al., "The complete genome of the hyperthermophilic bacterium <i>Aquifex aeolicus</i> "; <i>Nature</i> , 392:353-358 (March 1998)	
	AB	DEJONG, Ted M. et al., "Nitrogen Stress and Apparent Photosynthesis in Symbiotically Grown <i>Pisum sativum</i> L."; <i>Plant Physiol</i> , 68:309-313 (1981)	
	AC	EBERHARDT et al., "Cloning, sequencing, mapping and hyperexpression of the <i>ribC</i> gene coding for riboflavin synthase of <i>Escherichia coli</i> "; <i>Eur. J. Biochem.</i> , 242:712-719 (1996)	
	AD	FENTON et al., "Exploitation of Gene(s) Involved in 2,4-Diacetylphloroglucinol Biosynthesis to Confer a New Biocontrol Capability to a <i>Pseudomonas</i> Strain"; <i>Applied and Environmental Microbiology</i> , 58(12):3873-3878 (Dec. 1992)	
	AE	FLEISCHMANN et al., "Whole-Genome Random Sequencing and Assembly of <i>Haemophilus influenzae</i> Rd"; <i>Science</i> , 269:496-498 (July 1995)	
	AF	GENDY et al., "The response of growth, nodulation, and yield of soybean plants treated with riboflavin and nicotinic acid"; <i>Beitr.trop.Landwirtsch.Vet.med.</i> , 30 H.3:271-281 (1992)	
	AG	GRANT, R. and GRANT, C. Eds., <i>Grant & Hackh's Chemical Dictionary</i> , Fifth Edition (1987)	
	AH	GROCHOWSKA, "Chromatographic Degradation of Phloridzin"; <i>Plant Physiol.</i> , 41:432-436 (1966)	
	AI	HANSEN, G. K., <i>Physiol. Plant</i> , 39(4):275-279 (1977)	

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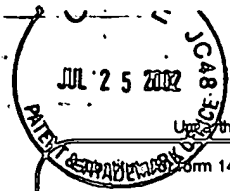
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Sheet 3 of 5

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Application Number	09/831,958
Filing Date	Nov mb r 17, 1999
First Named Inventor	Phillips, Donald A.
Art Unit	1651
Examiner Name	L. Blaine Lankford
Attorney Docket Number	02307Z-090130US

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	AJ	JONES, O.P., "Effect of phloridzin and phloroglucinol on apple shoots"; <i>Nature</i> , 262:592 (July 1976)	
	AK	KANEKO et al., "Sequence Analysis of the Genome of the Unicellular Cyanobacterium <i>Synechocystis</i> sp. Strain PCC6803. II. Sequence Determination of the Entire Genome and Assignment of Potential Protein-coding Regions"; <i>DNA Research</i> , 3:109-136 (1996)	
	AL	KEEL et al., "Pseudomonads as Antagonists of Plant Pathogens in the Rhizosphere: Role of the Antibiotic 2,4-Diacetylphloroglucinol in the Suppression of Black Root Rot of Tobacco"; <i>Symbiosis</i> , 9:327-341 (1990)	
	AM	LAPIDUS et al., "Sequencing and functional annotation of the <i>Bacillus subtilis</i> genes in the 200 kb <i>rrnB</i> - <i>dnaB</i> region"; <i>Microbiology</i> , 143:3431-3441 (1997)	
	AN	LEE et al., "The <i>Lux</i> Genes in <i>Photobacterium Leioqnathi</i> are Closely Linked With Genes Corresponding in Sequence to Riboflavin Synthesis Genes"; 186(2): 690-697 (1992)	
	AO	LEE et al., "Riboflavin Synthesis Genes Are Linked with the <i>lux</i> Operon of <i>Photobacterium phosphoreum</i> "; <i>Journal of Bacteriology</i> , 176(7):2100-2104 (April 1994)	
	AP	LUGTENBERG et al., "Microbial stimulation of plant growth and protection from disease"; <i>Current Opinion in Biotechnology</i> , 2:457-464 (1991)	
	AQ	MARRÉ et al., "Azione Di Stimolo Della Florizina Sulla Fotosintesi E Sulla Fotolisi Da Parte Di Cloroplasti Isolati"; <i>Nuovo Giornale Botanico Italiano</i> , LXII:566, (1955)	
	AR	NASEBY et al., "Impact of wild-type and genetically modified <i>Pseudomonas fluorescens</i> on soil enzyme activities and microbial population structure in the rhizosphere of pea"; <i>Molecular Ecology</i> , 7:617-625 (1998)	
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	AT	OERTLI, J.J., "Exogenous application of vitamins as regulators for growth and development of plants - a review"; <i>Z. Pflanzenemahr. Bodenk.</i> , 150:375-391 (1987)	
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	AV	RAO et al., "Reversal of Chloramphenicol Inhibited Growth By Riboflavin in Green Gram (<i>Phaseolus Radiatus</i> L.)"; <i>Current Science</i> , 44(11):399-400 (June 1975)	

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Sheet 4 of 5

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First Named Inventor Phillips, Donald A.
Art Unit 1651
Examiner Name L. Blaine Lankford
Attorney Docket Number 02307Z-090130US

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	AW	RAO et al., " ¹⁴ C Incorporation in Chloramphenicol Inhibited Growth And Its Reversal By Riboflavin in Green Gram"; <i>Current Science</i> , 44(22):818 (1975)	
	AX	RAO, P. Gopala, "Influence of Riboflavin on Growth, Respiration, and Chlorophyll and Protein Contents in Green Gram (<i>Phaseolus Radiatus</i> Linn.)"; <i>Current Science</i> , 42(16):580-581 (August 1973)	
	AY	RYLE et al., "The Respiratory Costs of Nitrogen Fixation in Soyabean, Cowpea, and White Clover"; <i>Journal of Experimental Botany</i> , 30(114):145-153 (February 1979)	
	AZ	SCHOTT et al., "Riboflavin Synthases of <i>Bacillus subtilis</i> "; <i>The Journal of Biological Chemistry</i> , 265(8):4204-4209 (March 1990)	
	BA	SHANAHAN et al., "Isolation, trace enrichment and liquid chromatographic analysis of diacetylphloroglucinol in culture and soil samples using UV and amperometric detection"; <i>Journal of Chromatography</i> , 606:171-177 (1992)	
	BB	SHANAHAN et al., "Liquid chromatographic assay of microbially derived phloroglucinol antibiotics for establishing the biosynthetic route to production, and the factors affecting their regulation"; <i>Analytica Chimica Acta</i> , 272:271-277 (1993)	
	BC	SONG et al., "Purification of Phytochrome by Affi-Gel Blue Chromatography; an Effect of Lumichrome on Purified Phytochrome"; <i>Analytical Biochemistry</i> , 117:32-39 (1981)	
	BD	STREIT et al., "Biotin and Other Water-Soluble Vitamins Are Key Growth Factors for Alfalfa Root Colonization by <i>Rhizobium meliloti</i> 1021"; <i>Molecular Plant-Microbe Interactions</i> , 9(5):330-338 (1996)	
	BE	STRZELCZYK et al., "Synthesis of Auxins from Tryptophan and Tryptophan-precursors by Fungi Isolated from Mycorrhizae of Pine (<i>Pinus silvestris</i> L.)"; <i>ACTA Microbiologica Polonica</i> , 26(3):255-264 (1977)	
	BF	TAURA et al., "Insertional disruption of the <i>nusB</i> (<i>ssyB</i>) gene leads to cold-sensitive growth of <i>Escherichia coli</i> and suppression of the <i>secY24</i> mutation"; <i>Mol. Gen. Genet.</i> , 234:429-432 (1992)	
	BG	VOLPIN et al., "Respiratory Elicitors from <i>Rhizobium meliloti</i> Affect Intact Alfalfa Roots"; <i>Plant Physiol.</i> , 116:777-783 (1998)	
	BH	WEST et al., "Synthesis of Growth Factors by <i>Rhizobium trifolii</i> "; <i>Nature</i> , No. 3591, pp. 397-398 (August 1938)	

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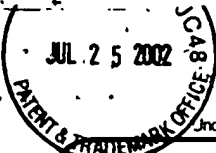
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	BI	YANAGITA et al., "A Bacterial Riboflavin Hydrolase"; <i>The Journal of Biological Chemistry</i> , 221(2): 593-607 (August 1956)	
	BJ	ZHANG et al., "Phosphoenolpyruvate Carboxylase Protein Kinase from Soybean Root Nodules: Partial Purification, Characterization, and Up/Down-Regulation by Photosynthate Supply from the Shoots"; <i>Archives of Biochemistry and Biophysics</i> , 343(2):260-268 (July 1997)	

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